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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/630,282	07/30/2003	Richard Martin Jacobson	A01395	9705

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EXAMINER

QAZI, SABIHA NAIM

ART UNIT	PAPER NUMBER
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1616

DATE MAILED: 09/06/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/630,282	<b>Applicant(s)</b> JACOBSON ET AL.	
	<b>Examiner</b> Sabiha Qazi	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 27 June 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 1 and 5-8 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) 2-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) 1 and 5-8 are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**Non-Final Office Action**

Claims 1-8 are pending. No claim is allowed at this time. Acknowledgement is made of the response filed on 6/27/2006.

**Summary of this Office Action dated August 31, 2006**

1. Response to Remarks
2. Information Disclosure Statement
3. Copending Applications
4. Specification
5. Double Patenting--Rejection
6. Claim Rejections - 35 USC § 103---1<sup>st</sup> Rejection
7. Claim Rejections - 35 USC § 103---2<sup>nd</sup> Rejection
8. Communication

#### Response to Remarks

- Applicant's arguments found persuasive therefore rejection over ROBINSON and 35 U.S.C. 112 first paragraph is withdrawn.
- Arguments regarding SEYFERTH are not found persuasive therefore rejection is maintained for the same reasons as set forth in our previous office action.
- Prior does teach 1, 2 dihalocyclopropane. The reference teaches that "1,1-dihalocyclopropanes means either 1,1 dihalocyclopropane itself or compounds having substituents on either of the other two carbon atoms in the cyclopropene ring (see lines 23-27 in column 1).
- Proviso in the definition of W is noted. Applicant is requested to tell us what prior art has been disclaimed.
- Restriction is now made FINAL.

#### Information Disclosure Statement

The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

#### Copending Applications

Applicants must bring to the attention of the examiner, or other Office official involved with the examination of a particular application, information within their knowledge as to other copending United States applications, which are "material to patentability" of the application in question. MPEP 2001.06(b). See *Dayco Products Inc. v. Total Containment Inc.*, 66 USPQ2d 1801 (CA FC 2003).

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### Specification

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

### 35 USC § 112 — Second Paragraph Indefiniteness Rejection

The following is a quotation of the second paragraph of 35 U.S.C. 112:

*The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.*

Claims 2-4 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

- What is intended by the term “comrising” in compound claim 2? A clarification is required. It is suggested to delete this term.

### Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 2-4 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1 and 2 of U.S. Patent No. 7,041,625 and claims 7-10 of US Patent 6,770,600 in view of MORRISON & BOYD (Organic Chemistry, 3<sup>rd</sup> edition, Prentice Hall India, New Delhi, 1981, Chapter 6, pages

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177-188). Although the conflicting claims are not identical, they are not patentably distinct from each other because the reference teaches reactions of carbon-carbon double bond, electrophilic and free radical addition. See sections 6.1 to 6.6 where various reactions are exemplified for addition reactions. See especially potential energy diagram Fig. 6.3 on page 185 where the potential energy of the saturated compound is much lower than the unsaturated meaning that stability of saturated compound is much higher than the unsaturated compound.

7. It would have been obvious to one skilled in the art to perform addition reaction to change a double bond to a single bond i.e. change from cyclopropene derivatives to cyclopropene derivatives. Since double bonds are more reactive than single bonds the compounds are more stable when they saturated compared to when not saturated (i.e. containing double bonds).

The reference teaches the conversion of double bond to a single bond.

#### Claim Rejections - 35 USC § 103—1<sup>st</sup> Rejection

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the

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obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claim 2-4 stand rejected under 35 U.S.C. 103(a) as being unpatentable over SEYFERTH et al. (US Patent 3,265,745) See the entire documents especially lines 23-51 in column 1, examples and claims.

Instant claims differ from the reference in claiming a broader scope wherein prior art teaches a subgenus of the cyclopropanes as claimed especially the compound of claim 4. The reference teaches that "1,1-dihalo cyclopropanes means either 1,1 dihalo cyclopropane itself or compounds having substituents on either of the other two carbon atoms in the cyclopropene ring (see lines 23-27 in column 1).

Prior art teaches 1, 2- dihalocyclopropanes wherein claim 4 compound is 1, 2-diiodo-1-methylcyclopropane and claim 2 is broad claim covers prior art compounds.

It would have been obvious to one skilled in the art to prepare additional cyclopropane compounds by selecting any halogen because prior art teaches these compounds. Since prior art teaches these compounds it would have been obvious to select any halo atom such as iodo at both positions. In view of the teachings of the cited reference presently claimed invention is considered obvious.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill might reasonably infer from the teachings. *In re opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA 1976). A reference is not limited to working examples. *In re Fracalossi* 215 USPQ 569 (CCPA 1982).

Accordingly, the burden of proof is upon applicants to show that instantly claimed subject matter is different and unobvious over those taught by prior art. See *In re Brown*, 173 USPQ 685, 688; *In re Best*, 195 USPQ 430 and *In re Marosi*, 218 USPQ 289, 293.

In absence of any criticality and/or unexpected results presently claimed invention is considered obvious over the prior art.

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In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

#### Claim Rejections - 35 USC § 103—2<sup>nd</sup> Rejection

8. Claim 2-4 stand rejected under 35 U.S.C. 103(a) as being unpatentable of BAIRD et al. (J. Chem. Soc. Perkin Trans 1, 1986, pp 1845-1853). Baird teaches addition of substituents to cyclopropene compound 11 by addition of bromine in carbontetrachloride led to compound 12, see reaction scheme of compounds 10-17, in column 1 on page 1846 of the reference. A cyclopropane can be prepared by the addition reaction of cyclopropene.

Instant claims differ from the reference in claiming a broad range of cyclopropane compounds as in claim 2 where in prior art teaches addition reactions of the cyclopropenes as well as some cyclopane derivatives

It would have been obvious to one skilled in the art to prepare additional cyclopropane compounds by. Since prior teaches these compounds it would have been obvious to select any halo atom such as iodo at both positions. In view of the teachings of the cited reference presently claimed invention is considered obvious.

A reference is good not only for what it teaches by direct anticipation but also for what one of ordinary skill might reasonably infer from the teachings. *In re opprecht* 12 USPQ 2d 1235, 1236 (Fed Cir. 1989); *In re Bode* 193 USPQ 12 (CCPA 1976). A reference is not limited to working examples. *In re Fracalossi* 215 USPQ 569 (CCPA 1982).

Accordingly, the burden of proof is upon applicants to show that instantly claimed subject matter is different and unobvious over those taught by prior art. See *In re Brown*, 173 USPQ 685, 688; *In re Best*, 195 USPQ 430 and *In re Marosi*, 218 USPQ 289, 293.

In absence of any criticality and/or unexpected results presently claimed invention is considered obvious over the prior art.



In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

#### Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi, Ph.D. whose telephone number is 571-272-0622. The examiner can normally be reached on any business day.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's acting supervisor, Johann Richter, Ph.D. can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



SABIHA QAZI, PH.D.  
PRIMARY EXAMINER